

ABSTRACT OF THE DISCLOSURE

5 A conductive element with a lateral oxidation barrier is provided for the control of lateral oxidation processes in semiconductor devices such as lasers, vertical cavity surface emitting lasers and light emitting diodes. The oxidation barrier is formed through modification of one or more layers which initially were receptive to oxidation. The quality of material directly below the oxidation barrier may be preserved. Related applications include the formation of vertical cavity surface emitting lasers on non-GaAs substrates and on GaAs substrates.